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EXAMINER

BONZO, BRYCE P

ART UNIT PAPER NUMBER

2114

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/815,443

Applicant(s)

QUAN ET AL.

Examiner

Bryce P Bonzo

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11, 13-18, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 12 and 19 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/19/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1-21 are pending.

Claims 1-3 and 5 are rejected under 35 USC §102.

Claim 7 is rejected under 35 USC §103.

Claims 6, 12 and 19 are rejected under 35 USC §112.

Claims 8-11, 13-18, 20 and 21 are allowed.

Claim 4 is objected to while containing allowable matter.

Objections to the Specification

The specification routinely makes reference to co-pending applications for which serial numbers are not provided. Applicant is required to amend the specification to clearly set forth the serial/patent number of the co-pending applications which are incorporated by reference.

Rejections under 35 USC §112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 12, and 19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner has been unable to locate a portion of the specification as filed wherein the predetermined number of cycles used to determine if a control signal was received is equal to zero. The Examiner does believe Applicant does enable the use of zero cycles for another use in a different aspect of the invention unrelated to determining if a control signal was received.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Eskandari (United States patent No. 6,260,096 B1).

As per claim 1, Eskandri discloses:

a) predicting, in a first cycle, that a transaction should be transmitted from the first repeater to the second repeater (column 3, line 64 through column 4, line 13)

b) determining if a control signal was received within a predetermined number of cycles of the first cycle (column 4, lines 15-6); and

c) if the control signal was not received within the predetermined number of cycles of the first cycle, then generating an error (column 4, lines 15-26).

As per claim 2, Eskandari discloses:

wherein the act of predicting that a transaction should be transmitted includes an arbiter predicting that the transaction should be transmitted (Figure 3, item 302, bridge as an arbiter).

As per claim 3, Eskandari discloses:

wherein the act of predicting that the transaction should be transmitted includes a distributed arbiter predicting that the transaction should be transmitted (column 4, lines 47-61).

As per claim 5, Eskandari discloses:

wherein the act of determining if the control signal was received includes determining if a valid transaction signal was received (column 4, lines 23-26).

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Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eskandari (United States patent No. 6,260,096 B1).

As per claim 7:

Eskandari discloses the aspects of claim 1 above.

Eskandari does not specifically disclose the selection of one cycle. Eskandari does disclose the selection of a certain period. The Examiner asserts that one cycle is encompassed by a certain period. As Eskandari is attempting to transfer data across a bus in the fastest possible manner, setting the certain period of time to the minimum resolution (1 clock cycle) would have been obvious to one ordinary skill in art at the time of invention. No other time value can accomplish a fast fail as fast as providing a single clock cycle for a reception. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to select one cycle as the predetermined time in the system of Eskandari in order to detect a failure of transmission as fast as possible.

Allowable Matter

Claims 8-11, 13-18, 20 and 21 are allowed.

Claim 4 is objected to while containing allowable matter.

The following is an examiner's statement of reasons for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance." Applicant is reminded that any change to the scope of these claims may jeopardize this indication of allowable matter, and result in a Final Rejection. For applicant's convenience, the portions of the claims which overcome the prior art are italicized below.

As per claim 4: *wherein the act of the arbiter predicting that the transaction should be transmitted is based at least in part upon the arbiter receiving a second signal from a third repeater.*

As per claims 8-11, 13 and 14:

In a computer system having a first repeater, a second repeater, and a third repeater, the first repeater coupled to the second repeater *and the third repeater*, the first repeater operable to transmit a transaction to the second repeater and operable to

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transmit a control signal to the third repeater, *a method, performed by the third repeater, of generating an error comprising:*

a) predicting, in a first cycle, that a transaction that originated *from the third repeater should be transmitted from the first repeater to the second repeater,*

b) determining if a control signal was received within a predetermined number of cycles of the first cycle; and

c) if the control signal was not received within the predetermined number of cycles of the cycle in which the prediction was made, then generating an error.

As per claims 15-18, 20 and 21:

In a computer system having a first repeater, a second repeater, and a *third repeater*, the first repeater coupled to the second repeater and the third repeater, the first repeater operable to transmit a transaction to the second repeater and operable to transmit a control signal to the second repeater, *a method, performed by the second repeater, of generating an error comprising:*

a) predicting, in a first cycle, that a transaction that originated *from the third repeater should be transmitted from the first repeater to the second repeater,*

b) determining if a control signal was received within a predetermined number of cycles of the first cycle; and

c) if the control signal was not received within the predetermined number of cycles of the first cycle, then generating an error.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (703) 305-4834. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bryce P Bonzo
Examiner
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